

CLAIMS

1. An RNA capable of suppressing the expression of KLF5 gene, which comprises a sequence consisting of 15 to 30 contiguous nucleotides of KLF5 mRNA and a sequence complementary to the sequence.
2. The RNA according to claim 1, wherein the KLF5 mRNA is human KLF5 mRNA or mouse KLF5 mRNA.
3. The RNA according to claim 1 or 2, wherein the RNA is a double-stranded RNA consisting of a strand of a sequence consisting of 15 to 30 contiguous nucleotides of KLF5 mRNA and a strand of a sequence complementary to the sequence, in which 1 to 6 nucleotides are added to the 3'-terminus of each of the strands.
4. The RNA according to claim 1 or 2, wherein the RNA is an RNA forming a hairpin structure, which is obtained by ligating an RNA having a sequence consisting of 15 to 30 contiguous nucleotides of the KLF5 mRNA to an RNA having a sequence complementary to the sequence via a spacer oligonucleotide, and then adding 1 to 6 nucleotides to the 3'-terminus thereof.
5. An RNA capable of suppressing the expression of KLF5 gene, which is selected from the group consisting of the following (a) to (c):
 - (a) a double-stranded RNA having a strand of a sequence shown in any one of SEQ ID NOS: 2 to 16 and a strand of a sequence complementary to the sequence, in which 2 to 4 uridylic acids or deoxythymidylic acids are added to the 3'-terminus of each of the strands;
 - (b) an RNA forming a hairpin structure, which is obtained by ligating an RNA having a sequence shown in any one of SEQ ID NOS: 2 to 16 to an RNA having a sequence complementary to the sequence via spacer oligonucleotide that has 2 uridylic acids or deoxythymidylic acids at the 5'-terminus thereof, and then adding 2 to 4 uridylic acids or deoxythymidylic acids to the 3'-terminus thereof; and
 - (c) a double-stranded RNA consisting of a strand of a sequence shown in any one of SEQ ID NOS: 2 to 11 and a strand of a sequence complementary to the sequence, in which 2 uridylic acids are added to the 3'-terminus of each of the strands.
6. A vector, which allows the RNA according to any one of claims 1 to 5 to be expressed.
7. A method of suppressing the expression of KLF5 gene in cells by transfecting the RNA according to any one of claims 1 to 5 or the vector according to claim 6 into

the cells.

8. A method of suppressing the expression of a gene whose transcription is activated by KLF5 in cells by transfecting the RNA according to any one of claims 1 to 5 or the vector according to claim 6 into the cells.

9. The method according to claim 8, wherein the gene whose transcription is activated by KLF5 is platelet-derived growth factor A chain gene or a smooth muscle myosin heavy chain SMemb gene.

10. A pharmaceutical composition, which comprises, as an active ingredient, the RNA according to any one of claims 1 to 5 or the vector according to claim 6.

11. A pharmaceutical composition for inhibiting angiogenesis, which comprises, as an active ingredient, the RNA according to any one of claims 1 to 5 or the vector according to claim 6.

12. A therapeutic or preventive agent for cardiovascular disease or cancer, which comprises, as an active ingredient, the RNA according to any one of claims 1 to 5 or the vector according to claim 6.

13. The therapeutic or preventive agent according to claim 12, wherein the cardiovascular disease is arteriosclerosis, restenosis occurring after coronary intervention, or cardiac hypertrophy.